

Amendments to the Specification:

Please amend the paragraph at page 30, lines 1 and 2 as follows:

~~FIG. 10 is an~~ FIGS. 10(a), 10(b) and 10(c) are
~~explanatory diagram~~ diagrams of interpolation calculation
LUT creation;

Please amend the paragraph at page 30, lines 3 and 4 as follows:

~~FIG. 11(a), FIG. 11(b) and FIG. 11(c) are~~ 11 is an
~~explanatory diagrams~~ diagram of scaling coefficient changing
based on LUTS;

Please amend the paragraph at page 38, line 11 to page 39, line 2 as follows:

More specifically, if $\Delta\alpha$ is equal to Δ_{min} , the weighted average is represented by the following expression:

$$\text{Weighted average} = (\alpha + a + \alpha')/3$$

This value is defined as a new pixel value "a". Or when the source image is to undergo gentle noise reduction, the following expression can be used:

$$\text{Weighted average} = \cancel{(\alpha + 2 + \alpha')/4} \quad \underline{(\alpha + 2a + \alpha')/4}$$

It is possible by adopting the above-described configuration to reduce strong image noise with the edge of image information being left intact. Also, according to this embodiment, since greater information differences than the threshold value are not smoothed, edge information can be left intact more easily.

Please amend the paragraph at page 40, lines 3-22 as follows:

FIG. 5 is yet another explanatory diagram of noise filtering. This figure shows an example of 3x3 filtering. Assume that the set consisting of " δ ", "a", and " δ' ", the set consisting of β , "a", and β' , and the set consisting of " γ ", "a", and " γ' ", are smaller than the value obtained by adding "const" to the minimum value. At this time, the weighted average of point "a" is represented by the following expression:

$$\dots (\beta + \beta' + \gamma + \gamma' + \delta + \delta' + a)/7$$

The new value that has thus been obtained is taken as "a". According to this method, the noticed pixel having a significantly great value can be provided with strong filtering. In the above expression, weighting can be conducted as required. For example, a new value can be calculated as follows:

$$(\beta + \beta' + \gamma + \gamma' + \delta + \delta' + 2a)/8$$

According to this embodiment, since greater information differences than the threshold value are not smoothed, it is possible to provide filtering that permits edge information to be left intact more easily.

Please amend the paragraph at page 46, line 13 to page 47, line 2 as follows:

The characteristics of the LUT in another example of nine-point interpolation are shown in (c), and in this characteristics curve, the weighting coefficient is made valid for grid-to-grid distances up to 1.5. The LUT having the characteristics of (a), the LUT having the characteristics of (b), and the LUT having the characteristics of (c) are defined as LUTA, LUTB, LUTC, and LUTC, respectively. In the case of LUTA, since the weighting coefficient is also valid for grid-to-grid distances up to 1.0, the occurrence of moire-like noise can be suppressed. In the case of LUTB LUTC, since the weighting coefficient is valid for grid-to-grid distances up to 1.5, a greater moire reduction effect than in the case of LUTA can be obtained.